

ABSTRACT

A method for modeling the output waveform of a cell driving a resistance-capacitance network includes multiple effective capacitances. A method of calculating Thevenin parameters includes the steps of (a) initializing estimates of effective capacitances C_{eff1} and C_{eff2} , of a switching threshold delay t_0 , and of a slope delay $deltat$; (b) solving ramp response equations for t_0 and $deltat$ as a function of C_{eff1} and C_{eff2} ; (c) comparing the estimates of t_0 and $deltat$ with solutions for t_0 and $deltat$ found in step (b); and (d) replacing the estimates of t_0 and $deltat$ with the solutions for t_0 and $deltat$ if the solutions for t_0 and $deltat$ have not converged to the estimates of t_0 and $deltat$.